

## CONTENTS OF VOLUME THE EIGHTEENTH.

	PAGE
Economy of Coal as viewed by the Commander of a Steam Vessel. By P. FREDERICK SHORTLAND, Captain R.N., LL.D., &c. ....	2
Field Engineering, illustrated by some of the operations of the German Engineers during the War of 1870-71. By Lieut.-Colonel H. SCHAW, R.E., Professor of Fortification and Artillery, Staff College, Sandhurst .....	18
The Recruiting Question from a Military and a Medical Point of View. By A. LEITH ADAMS, Esq., F.R.S., Surgeon-Major, London Recruiting District .....	55
The Retreat of the Ten Thousand, a Military Study for all Time. By Major-General J. L. VAUGHAN, C.B. ....	99
Sanitary Precautions to be observed in the Moving and Camping of Troops in Tropical Regions. By Surgeon-General W. C. MACLEAN, M.D., C.B., Professor of Military Medicine, Army Medical School, Netley .....	114
Ventilation of Ships, especially of Low Freeboard and Hospital Ships. By Staff-Surgeon J. D. MACDONALD, M.D., F.R.S., R.N., Professor of Naval Hygiene, Army Medical School, Netley .....	136
Proposed Formation of a Battalion for the Attack. By Major T. S. BIGGE, 5th Fusiliers.....	152
Further Experiments with his Bow- and Stern-Screw Propeller. By R. GRIFFITHS, Esq. ....	157
Recent Improvements in the Manufacture of Pebble-powder. By Major J. P. MORGAN, R.A., Assist.-Supt. Royal Gunpowder Factory, Waltham Abbey.....	171
The late Russian Campaign against Khiva. By Captain FREDERICK C. TRENCH, F.R.G.S., 20th Hussars .....	212
The Strategical Importance of the Military Harbours in the British Channel as Connected with Defensive and Offensive Operations. By Major-General T. B. COLLINSON, R.E. ....	227
On a New Book of Stellar Azimuth Tables, and on a Newly-invented Illuminated Stellar Azimuth Compass. By WILLIAM S. CROUDACE.....	265
On Croudace's Ordnance Night-sight Vane or Collimator. By WILLIAM S. CROUDACE.....	269
On Improvements in Apparatus for Lowering and Raising, Engaging and Disengaging Ships' Boats. By A. FOLKARD, Esq., M. Inst. C.E. ....	278
British Interference with revolted Spanish Ships in 1873. By Captain HUGH McNEIL DYER, R.N. ....	283
A Few Notes on Captain Dyer's Paper. By Vice-Admiral Sir FREDERICK W. E. NICOLSON, Bart., C.B. ....	290
Suggested Improvements in Sanitary Arrangements for Hospitals, Barracks, Camps, and Shipping, &c. By Major-General MILLINGTON SYNGE, R.E....	299
The Volta Expedition during the Ashantee Campaign. By Captain Sir JOHN H. GLOVER, G.C.M.G., R.N. ....	317
The Ashanti Expedition of 1873-4. By Colonel EVELYN WOOD, V.C., C.B., 90th Light Infantry.....	331

	PAGE
Three Years with the Royal Naval Reserve. By Commander H. W. BRENT, R.N. ....	358
H.M.S. "Victor Emanuel" as an Hospital Ship during the late Ashantee Campaign. By Vice-Admiral A. P. RYDER.....	383
Breech-loading and Muzzle-loading for Guns. By Major J. P. MORGAN, R.A., Assist.-Supt. Royal Gunpowder Factory, Waltham Abbey.....	408
Note on the Battle of Thrasyment. By the late Lieut.-General Sir CHARLES J. NAPIER, G.C.B. ....	439
A Review of the Improvements in Military Tactics and Formations in Germany during the last year (1873), being a Précis of an Article from the "Militaire Wochenblatt." By Colonel OUVRY, C.B. ....	441
Artillery-fire in Peace Manœuvres. By Captain L. M. CARMICHAEL, 5th Royal Irish Lancers.....	449
The Military Geography of Central Asia. By Colonel VALENTINE BAKER, late 10th Royal Hussars.....	453
On certain Roads between Turkestan and India, independent of the Oxus or of any Oxus Boundary. By Colonel Sir FREDERIC GOLDSMID, C.B., K.C.S.I., &c. ....	469
The Constitution and Duties of the Artillery of the Advanced Guard of an Army in the Field. By Lieut. S. C. PRATT, R.A. (the R.A. Institution Prize Essay of 1874) ....	489
The Scientific Study of Naval History. By J. K. LAUGHTON, Esq., R.N., M.A., Mathematical and Naval Instructor, Royal Naval College, Greenwich	508
A New Adaptation of Screw-propulsion. By Rear-Admiral J. AYLMER PAYNTER.....	527
A Statement to accompany the Russian "Ramming" Diagrams presented to the Royal United Service Institution. By Vice-Admiral A. P. RYDER ....	535
Erratum.—Col. Evelyn Wood's Lecture on the Ashanti Campaign of 1873-74.	
For names of Members who joined the Institution between the 1st January and the 22nd June, 1874, see pages 1, 55, 114, 157, 171, 227, 265, 358, 408, 508.	
Proceedings of the Forty-fourth Anniversary Meeting .....	i
Statement of Changes amongst the Members .....	vii
Tabular Analysis .....	viii
Award of Referees (Prize Essay on "Recruiting") and Presentation of Gold Medal .....	xi
Address of the Chairman .....	xiii
Names of Members who joined the Institution between the 22nd June and the 31st December, 1874.....	xv
Additions to the Library :—	
Books presented .....	xvi
Books purchased .....	xxiii
Maps, plans, charts, &c. ....	xxvi
Additions to the Museum .....	xxviii

